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## ABSTRACT

A novel method and apparatus is presented for providing transparent mobility of an entity within a network, by allowing the entity, which has a communication path set up between it and a peer entity, to move from one location to another, without informing the peer entity of this movement, and without having the communication path broken. The invention is applicable to decentralized networks using IP protocols, and is particularly applicable on networks where the mobility mechanism neither introduces latency nor decreases the available bandwidth of the network. In the invention, neither is latency increased nor is bandwidth utilization increased, as is done in other mobility models. Additionally, the invention utilizes standard protocols that are widely available from a plurality of equipment manufacturers on a variety of platforms. Thus, the invention provides a very cost-effective model for network providers that need to support transparent mobility within their networks.